Witold K Subczynski

List of Publications by Year
in descending order

94	4,279	76196 40	118652 62
papers	citations	h-index	g-index

94	94	94	2672
all docs	docs citations	times ranked	citing authors

#	Article	IF	Citations
1	Role of cholesterol in maintaining the physical properties of the plasma membrane. , 2022, , 41-71.		0
2	Chirality affects cholesterol-oxysterol association in water, a computational study. Computational and Structural Biotechnology Journal, 2021, 19, 4319-4335.	1.9	2
3	Factors Differentiating the Antioxidant Activity of Macular Xanthophylls in the Human Eye Retina. Antioxidants, 2021, 10, 601.	2.2	14
4	Differences in the properties of porcine cortical and nuclear fiber cell plasma membranes revealed by saturation recovery EPR spin labeling measurements. Experimental Eye Research, 2021, 206, 108536.	1.2	5
5	Factors Determining Barrier Properties to Oxygen Transport Across Model and Cell Plasma Membranes Based on EPR Spin-Label Oximetry. Applied Magnetic Resonance, 2021, 52, 1237.	0.6	4
6	Formation of cholesterol Bilayer Domains Precedes Formation of Cholesterol Crystals in Membranes Made of the Major Phospholipids of Human Eye Lens Fiber Cell Plasma Membranes. Current Eye Research, 2020, 45, 162-172.	0.7	24
7	Hypothetical Pathway for Formation of Cholesterol Microcrystals Initiating the Atherosclerotic Process. Cell Biochemistry and Biophysics, 2020, 78, 241-247.	0.9	10
8	Why Is Zeaxanthin the Most Concentrated Xanthophyll in the Central Fovea?. Nutrients, 2020, 12, 1333.	1.7	24
9	Mechanisms enhancing the protective functions of macular xanthophylls in the retina during oxidative stress. Experimental Eye Research, 2019, 178, 238-246.	1.2	13
10	Confocal Microscopy Confirmed that in Phosphatidylcholine Giant Unilamellar Vesicles with very High Cholesterol Content Pure Cholesterol Bilayer Domains Form. Cell Biochemistry and Biophysics, 2019, 77, 309-317.	0.9	11
11	Why Is Very High Cholesterol Content Beneficial for the Eye Lens but Negative for Other Organs?. Nutrients, 2019, 11, 1083.	1.7	26
12	Characterization of the Distribution of Spinâ€“Lattice Relaxation Rates of Lipid Spin Labels in Fiber Cell Plasma Membranes of Eye Lenses with a Stretched Exponential Function. Applied Magnetic Resonance, 2019, 50, 903-918.	0.6	11
13	Oxygenic photosynthesis: EPR study of photosynthetic electron transport and oxygen-exchange, an overview. Cell Biochemistry and Biophysics, 2019, 77, 47-59.	0.9	5
14	Detection of cholesterol bilayer domains in intact biological membranes: Methodology development and its application to studies of eye lens fiber cell plasma membranes. Experimental Eye Research, 2019, 178, 72-81.	1.2	15
15	Carotenoid-membrane interactions in liposomes: effect of dipolar, monopolar, and nonpolar carotenoids.. Acta Biochimica Polonica, 2019, 53, 475-484.	0.3	64
16	Pure Cholesterol Bilayer Domains are Formed at Cholesterol Contents Significantly Lower than Cholesterol Solubility Thresholds in Phospholipid Membranes: EPR and DSC Studies. Biophysical Journal, 2018, 114, 450a.	0.2	1
17	Is the cholesterol bilayer domain a barrier to oxygen transport into the eye lens?. Biochimica Et Biophysica Acta - Biomembranes, 2018, 1860, 434-441.	1.4	28
18	Detection of Pure Cholesterol Bilayer Domains in Biological Membranes Overloaded with Cholesterol: Methodology Development and its Application to Porcine Lens Membrane Studies. Biophysical Journal, 2018, 114, 449a.	0.2	1

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19	Organization of lipids in fiber-cell plasma membranes of the eye lens. Experimental Eye Research, 2017, 156, 79-86.	1.2	25
20	High Cholesterol/Low Cholesterol: Effects in Biological Membranes: A Review. Cell Biochemistry and Biophysics, 2017, 75, 369-385.	0.9	204
21	Oxidation of Polyunsaturated Phospholipid Decreases the Cholesterol Content at which Cholesterol Bilayer Domains Start to form in Phospholipid-Cholesterol Membranes. Biophysical Journal, 2017, 112, 375a.	0.2	4
22	Cholesterol Bilayer Domains in the Eye Lens Health: A Review. Cell Biochemistry and Biophysics, 2017, 75, 387-398.	0.9	29
23	Saturation Recovery EPR Spin-Labeling Method for Quantification of Lipids in Biological Membrane Domains. Applied Magnetic Resonance, 2017, 48, 1355-1373.	0.6	14
24	Changes in the Properties and Organization of Human Lens Lipid Membranes Occurring with Age. Current Eye Research, 2017, 42, 721-731.	0.7	38
25	Broadband W-band Rapid Frequency Sweep Considerations for Fourier Transform EPR. Cell Biochemistry and Biophysics, 2017, 75, 259-273.	0.9	6
26	Can Xanthophyll-Membrane Interactions Explain Their Selective Presence in the Retina and Brain?. Foods, 2016, 5, 7.	1.9	49
27	Enhancement of Paramagnetic Relaxation by Photoexcited Gold Nanorods. Scientific Reports, 2016, 6, 24101.	1.6	1
28	Cholesterol Bilayer Domain in Phospholipid Bilayer Membranes can be Detected by Confocal Microscope. Biophysical Journal, 2015, 108, 403a-404a.	0.2	2
29	Amounts of phospholipids and cholesterol in lipid domains formed in intact lens membranes: Methodology development and its application to studies of porcine lens membranes. Experimental Eye Research, 2015, 140, 179-186.	1.2	9
30	Lipid domains in intact fiber-cell plasma membranes isolated from cortical and nuclear regions of human eye lenses of donors from different age groups. Experimental Eye Research, 2015, 132, 78-90.	1.2	26
31	Properties of membranes derived from the total lipids extracted from clear and cataractous lenses of 61â€“70-year-old human donors. European Biophysics Journal, 2015, 44, 91-102.	1.2	39
32	Spin-Labeled Small Unilamellar Vesicles with the T 1-Sensitive Saturation-Recovery EPR Display as an Oxygen-Sensitive Analyte for Measurement of Cellular Respiration. Applied Magnetic Resonance, 2015, 46, 885-895.	0.6	6
33	Spin-label W-band EPR with Seven-Loopâ€“Six-Gap Resonator: Application to Lens Membranes Derived from Eyes of a Single Donor. Applied Magnetic Resonance, 2014, 45, 1343-1358.	0.6	17
34	Why has Nature Chosen Lutein and Zeaxanthin to Protect the Retina?. Journal of Clinical & Experimental Ophthalmology, 2014, 05, 326.	0.1	58
35	Lipidâ€“protein interactions in plasma membranes of fiber cells isolated from the human eye lens. Experimental Eye Research, 2014, 120, 138-151.	1.2	22
36	Properties of membranes derived from the total lipids extracted from the human lens cortex and nucleus. Biochimica Et Biophysica Acta - Biomembranes, 2013, 1828, 1432-1440.	1.4	50

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37	Using spin-label W-band EPR to study membrane fluidity profiles in samples of small volume. Journal of Magnetic Resonance, 2013, 226, 35-44.	1.2	36
38	Comparative Computer Simulation Study of Cholesterol in Hydrated Unary and Binary Lipid Bilayers and in an Anhydrous Crystal. Journal of Physical Chemistry B, 2013, 117, 8758-8769.	1.2	23
39	Formation of Cholesterol Bilayer Domains Precedes Formation of Cholesterol Crystals in Cholesterol/Dimyristoylphosphatidylcholine Membranes: EPR and DSC Studies. Journal of Physical Chemistry B, 2013, 117, 8994-9003.	1.2	52
40	Saturation with cholesterol increases vertical order and smoothes the surface of the phosphatidylcholine bilayer: A molecular simulation study. Biochimica Et Biophysica Acta - Biomembranes, 2012, 1818, 520-529.	1.4	49
41	Properties of fiber cell plasma membranes isolated from the cortex and nucleus of the porcine eye lens. Experimental Eye Research, 2012, 97, 117-129.	1.2	32
42	Functions of Cholesterol and the Cholesterol Bilayer Domain Specific to the Fiber-Cell Plasma Membrane of the Eye Lens. Journal of Membrane Biology, 2012, 245, 51-68.	1.0	64
43	Phases and domains in sphingomyelinâ€"cholesterol membranes: structure and properties using EPR spin-labeling methods. European Biophysics Journal, 2012, 41, 147-159.	1.2	36
44	Can macular xanthophylls replace cholesterol in formation of the liquid-ordered phase in lipid-bilayer membranes?. Acta Biochimica Polonica, 2012, 59, 109-14.	0.3	6
45	Structural aspects of the antioxidant activity of lutein in a model of photoreceptor membranes. Acta Biochimica Polonica, 2012, 59, 119-24.	0.3	7
46	Phase-Separation and Domain-Formation in Cholesterol-Sphingomyelin Mixture: Pulse-EPR Oxygen Probing. Biophysical Journal, 2011, 101, 837-846.	0.2	35
47	The immiscible cholesterol bilayer domain exists as an integral part of phospholipid bilayer membranes. Biochimica Et Biophysica Acta - Biomembranes, 2011, 1808, 1072-1080.	1.4	58
48	Spin-label saturation-recovery EPR at W-band: Applications to eye lens lipid membranes. Journal of Magnetic Resonance, 2011, 212, 86-94.	1.2	22
49	Membrane fluidity profiles as deduced by saturation-recovery EPR measurements of spin-lattice relaxation times of spin labels. Journal of Magnetic Resonance, 2011, 212, 418-425.	1.2	49
50	Using spin-label electron paramagnetic resonance (EPR) to discriminate and characterize the cholesterol bilayer domain. Chemistry and Physics of Lipids, 2011, 164, 819-829.	1.5	60
51	Location of macular xanthophylls in the most vulnerable regions of photoreceptor outer-segment membranes. Archives of Biochemistry and Biophysics, 2010, 504, 61-66.	1.4	59
52	Studying Lipid Organization in Biological Membranes Using Liposomes and EPR Spin Labeling. Methods in Molecular Biology, 2010, 606, 247-269.	0.4	50
53	Physical properties of lipid bilayers from EPR spin labeling and their influence on chemical reactions in a membrane environment. Free Radical Biology and Medicine, 2009, 46, 707-718.	1.3	69
54	Physical properties of the lipid bilayer membrane made of cortical and nuclear bovine lens lipids: EPR spin-labeling studies. Biochimica Et Biophysica Acta - Biomembranes, 2009, 1788, 2380-2388.	1.4	46

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55	Saturation recovery EPR and ELDOR at W-band for spin labels. Journal of Magnetic Resonance, 2008, 193, 297-304.	1.2	44
56	The liquid-ordered phase in sphingomyelincholesterol membranes as detected by the discrimination by oxygen transport (DOT) method. Cellular and Molecular Biology Letters, 2008, 13, 430-51.	2.7	21
57	Transmembrane localization of cis-isomers of zeaxanthin in the host dimyristoylphosphatidylcholine bilayer membrane. Biochimica Et Biophysica Acta - Biomembranes, 2008, 1778, 10-19.	1.4	8
58	Characterization of lipid domains in reconstituted porcine lens membranes using EPR spin-labeling approaches. Biochimica Et Biophysica Acta - Biomembranes, 2008, 1778, 1079-1090.	1.4	41
59	Physical properties of the lipid bilayer membrane made of calf lens lipids: EPR spin labeling studies. Biochimica Et Biophysica Acta - Biomembranes, 2007, 1768, 1454-1465.	1.4	50
60	Oxygen permeability of the lipid bilayer membrane made of calf lens lipids. Biochimica Et Biophysica Acta - Biomembranes, 2007, 1768, 2635-2645.	1.4	104
61	Three-Dimensional Dynamic Structure of the Liquid-Ordered Domain in Lipid Membranes as Examined by Pulse-EPR Oxygen Probing. Biophysical Journal, 2007, 92, 1573-1584.	0.2	64
62	Saturation-Recovery Electron Paramagnetic Resonance Discrimination by Oxygen Transport (DOT) Method for Characterizing Membrane Domains. Methods in Molecular Biology, 2007, 398, 143-157.	0.4	40
63	Accumulation of macular xanthophylls in unsaturated membrane domains. Free Radical Biology and Medicine, 2006, 40, 1820-1826.	1.3	47
64	Distribution of macular xanthophylls between domains in a model of photoreceptor outer segment membranes. Free Radical Biology and Medicine, 2006, 41, 1257-1265.	1.3	38
65	Carotenoid-membrane interactions in liposomes: effect of dipolar, monopolar, and nonpolar carotenoids. Acta Biochimica Polonica, 2006, 53, 475-84.	0.3	21
66	Concentration by centrifugation for gas exchange EPR oximetry measurements with loopâ€"gap resonators. Journal of Magnetic Resonance, 2005, 176, 244-248.	1.2	42
67	EPR Oximetry in Biological and Model Samples. , 2005, , 229-282.		23
68	Effects of pH-induced variations of the charge of the transmembrane Î±-helical peptide Ac-K2(LA)12K2-amide on the organization and dynamics of the host dimyristoylphosphatidylcholine bilayer membrane. Biochimica Et Biophysica Acta - Biomembranes, 2005, 1720, 99-109.	1.4	6
69	Spin-Label EPR T1Values Using Saturation Recovery from 2 to 35 GHzâ€. Journal of Physical Chemistry B, 2004, 108, 9524-9529.	1.2	48
70	Molecular Dynamics of 1-Palmitoyl-2-oleoylphosphatidylcholine Membranes Containing Transmembrane Î±-Helical Peptides with Alternating Leucine and Alanine Residues. Biochemistry, 2003, 42, 3939-3948.	1.2	45
71	Dynamics of raft molecules in the cell and artificial membranes: approaches by pulse EPR spin labeling and single molecule optical microscopy. Biochimica Et Biophysica Acta - Biomembranes, 2003, 1610, 231-243.	1.4	162
72	Is a fluid-mosaic model of biological membranes fully relevant? Studies on lipid organization in model and biological membranes. Cellular and Molecular Biology Letters, 2003, 8, 147-59.	2.7	45

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73	Pulse EPR Detection of Lipid Exchange between Protein-Rich Raft and Bulk Domains in the Membrane: Methodology Development and Its Application to Studies of Influenza Viral Membrane. Biophysical Journal, 2001, 80, 738-748.	0.2	99
74	A Polyalanine-Based Peptide Cannot Form a Stable Transmembrane Î±-Helix in Fully Hydrated Phospholipid Bilayersâ€. Biochemistry, 2001, 40, 12103-12111.	1.2	37
75	Oriented Self-Association of Copper(II) Tetraphenylporphine in Liquid-Crystalline Lipid Bilayer Membranes:Â An EPR Study. Journal of the American Chemical Society, 1999, 121, 4054-4059.	6.6	3
76	Oxygen permeability of thylakoid membranes: electron paramagnetic resonance spin labeling study. Biochimica Et Biophysica Acta - Bioenergetics, 1998, 1365, 453-463.	0.5	62
77	Effects of polar carotenoids on the shape of the hydrophobic barrier of phospholipid bilayers. Biochimica Et Biophysica Acta - Biomembranes, 1998, 1368, 235-246.	1.4	90
78	Molecular Organization and Dynamics of 1-Palmitoyl-2-oleoylphosphatidylcholine Bilayers Containing a Transmembrane Î±-Helical Peptideâ€. Biochemistry, 1998, 37, 3156-3164.	1.2	83
79	Membranes. Advances in Experimental Medicine and Biology, 1998, , 399-408.	0.8	11
80	Depth dependence of the perturbing effect of placing a bulky group (oxazolidine ring spin labels) in the membrane on the membrane phase transition. Biochimica Et Biophysica Acta - Biomembranes, 1996, 1278, 68-72.	1.4	16
81	Permeability of Nitric Oxide through Lipid Bilayer Membranes. Free Radical Research, 1996, 24, 343-349.	1.5	113
82	Molecular Organization and Dynamics in Bacteriorhodopsin-Rich Reconstituted Membranes: Discrimination of Lipid Environments by the Oxygen Transport Parameter Using a Pulse ESR Spin-Labeling Technique. Biochemistry, 1994, 33, 4947-4952.	1.2	89
83	Hydrophobic Barriers of Lipid Bilayer Membranes Formed by Reduction of Water Penetration by Alkyl Chain Unsaturation and Cholesterol. Biochemistry, 1994, 33, 7670-7681.	1.2	312
84	Spin-label studies on phosphatidylcholine-polar carotenoid membranes: effects of alkyl-chain length and unsaturation. Biochimica Et Biophysica Acta - Biomembranes, 1993, 1150, 173-181.	1.4	61
85	Effects of polar carotenoids on dimyristoylphosphatidylcholine membranes: a spin-label study. Biochimica Et Biophysica Acta - Biomembranes, 1992, 1105, 97-108.	1.4	138
86	Effect of alkyl chain unsaturation and cholesterol intercalation on oxygen transport in membranes: a pulse ESR spin labeling study. Biochemistry, 1991, 30, 8578-8590.	1.2	132
87	Effect of polar carotenoids on the oxygen diffusion-concentration product in lipid bilayers. An EPR spin label study. Biochimica Et Biophysica Acta - Biomembranes, 1991, 1068, 68-72.	1.4	116
88	Microimmiscibility and three-dimensional dynamic structures of phosphatidylcholine-cholesterol membranes: translational diffusion of a copper complex in the membrane. Biochemistry, 1990, 29, 7936-7945.	1.2	75
89	Rotational diffusion of a steroid molecule in phosphatidylcholine-cholesterol membranes: fluid-phase microimmiscibility in unsaturated phosphatidylcholine-cholesterol membranes. Biochemistry, 1990, 29, 4059-4069.	1.2	75
90	Spin-Label Oximetry. Biological Magnetic Resonance, 1989, , 399-425.	0.4	85

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91	Dynamic fluorescence quenching studies on lipid mobilities in phosphatidylcholine-cholesterol membranes. Biochimica Et Biophysica Acta - Biomembranes, 1987, 897, 238-248.	1.4	39
92	Assessment of the ESR spectra of copper 3-ethoxy-2-oxobutyraldehyde bis(thiosemicarbazonate) complexes CuKTSM2. Inorganic Chemistry, 1987, 26, 3945-3949.	1.9	15
93	Spin-label studies on phosphatidylcholine-cholesterol membranes: effects of alkyl chain length and unsaturation in the fluid phase. Biochimica Et Biophysica Acta - Biomembranes, 1986, 854, 307-317.	1.4	141
94	Effects of very small amounts of cholesterol on gel-phase phosphatidylcholine membranes. Biochimica Et Biophysica Acta - Biomembranes, 1986, 854, 318-320.	1.4	28